

REMARKS

Claims 1-43 are pending and rejected in this application.

Claims 1, 13, 19, 24, 29, 30, 31, 36, and 40 are amended hereby. Applicant submits that no new matter has been introduced as part of such changes.

Responsive to the rejection of claims 1-5, 7, 8, 11-19, and 23-43 as being rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,602,757 (Haseley et al) and U.S. Patent No. 5,633,811 (Canada et al), Applicant has amended claims 1, 19, 29, 30, 36, and 40 and submits that claims 1-5, 7, 8, 11-19, and 23-43 are now in condition for allowance.

In the Advisory Action dated January 22, 2004, the Examiner contends that the recitation of the monitoring of a press machine in the independent claims is a recitation of the intended use of the claimed invention. The Examiner further states that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. The Examiner submits that if the prior art structure is capable of performing the intended use, then it meets the claim limitation. The Examiner further argues that, in a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art.

In an attempt to support to an argument that the prior art is capable of performing the intended use, the Examiner cites that the vibration monitoring systems of both Haseley et al (column 1, lines 10-20) and Canada et al can be applied to a wide

variety of mechanical machines. However, neither Haseley et al nor Canada et al discloses or suggests a press controller that is configured for selectably controlling a mechanical press in accordance with the monitored vibration severity and the corresponding severity operating zone for this monitored vibration severity. Note that the microcontroller of Haseley et al '757 is used to compare the corresponding vibration data with at least one predetermined key frequency to predict the present and future condition of a particular rotative element (column 2, lines 46-52). Thus, Haseley et al fails to specifically disclose or suggest a press controller that is configured to control a mechanical press based upon the vibration data gathered by the instrument.

Furthermore, Canada et al '811, while disclosing a vibration data collector and analyzer system, does not disclose or suggest a controller that is specifically arranged and designed to control the operation of a mechanical press. Additionally, the CPU 80 of Canada et al (column 12, lines 1-14; column 13, lines 40-45) is configured simply to control the manipulation of the data gathered by the system. Canada et al does not disclose or suggest that CPU 80 has the design capability of controlling the operation of another machine based upon this manipulated data. Accordingly, Haseley et al '757 and Canada et al '811, taken alone or in combination, fail to teach or suggest the present invention as set forth in each of independent claims 1, 19, 29, 30, 36, and 40, each as now amended.

Specifically, claim 1, as amended, recites in part:

[a] device for monitoring and controlling the operation of a mechanical press comprising: ...

a press control unit configured for selectably controlling said mechanical press in accordance with said calculated value in relation to a plurality of severity operating zones, each said severity operating zone defining a level of a potential long-term operating reliability of said mechanical press...

Claim 19, as amended, recites in part:

[a] device attachable to a mechanical press for measuring press conditions and controlling said mechanical press based on said press conditions, said device comprising: ...

a press control unit configured for selectably controlling said mechanical press in accordance with one said calculated value..., said press control unit being configured for relating each said at least one calculated value to one of a plurality of severity operating zones as a basis of control of said mechanical press...

Claim 29, as amended, recites in part:

[a] method of monitoring the long-term reliability of a mechanical press and controlling said mechanical press based on the long-term reliability thereof, comprising: ...

selectably controlling said mechanical press in accordance with the monitored vibration severity and the corresponding severity operating zone therefor.

Amended claim 30 recites in part:

a press machine controller being...configured for selectably controlling said press machine, said press machine controller being configured for relating said calculated value to a plurality of severity operating zones as a basis of control of said mechanical press...

Claim 36, as amended, recites in part:

[an] apparatus in combination with a press machine and a press machine sensor assembly, said apparatus comprising: ...

a press machine controller...being configured for relating said measurement value to one of a plurality of severity operating zones as a basis of control of said mechanical press...

Amended claim 40 recites in part:

[a] method in combination with a press machine, said method comprising the steps of: ...

selectably and operatively controlling said press machine in accordance with the vibration activity measurement, the vibration activity measurement being related to one of a plurality of severity operating zones as a basis of control of said mechanical press...

Applicant submits that such an invention as set forth in each of amended claims 1, 19, 29, 30, 36, and 40 is neither taught disclosed, nor suggested by Haseley et al '757, Canada et al '811, or any of the other cited references, alone or in combination. As set forth above, neither Haseley et al '757 nor Canada et al '811 discloses or suggests a press machine controller as part of the vibration monitoring system set forth by each of amended claims 1, 19, 29, 30, 36 and/or 40.

Additionally, Applicant hereby respectfully submits that the arguments set forth with respect to Haseley et al '757 and Canada et al '811 as set forth in our response dated August 4, 2003, and in our response dated November 21, 2003, are still deemed pertinent to the outstanding prior art rejection and are hereby incorporated by reference thereto. As a reminder of the argument set forth on pages 2 and 3 of the previous

response, the goal of Canada et al is actually to measure vibrations associated with a bearing and to eliminate noise created from outside sources (such as a mechanical press) and analyzing the vibration data with respect to such a bearing. Thus, the vibration monitoring system of Canada et al appears to be specific to bearings, and thus its suggestive power is limited in scope to systems in which vibrations associated with bearings is specifically addressed.

For all the foregoing reasons, Applicant submits that claims 1, 19, 29, 30, 36, and 40, and those claims depending therefrom, are now in condition for allowance and hereby respectfully request that the rejection thereof based upon Haseley et al in view of Canada et al be withdrawn.

Claim 6 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Haseley et al and Canada et al in view of U.S. Patent No. 4,302,813 (Kurihara et al). However, claim 6 depends from claim 1, which is in condition for allowance for the reasons set forth above. Accordingly, Applicant submits that claim 6 is also in condition for allowance, the allowance of which is hereby respectfully requested.

Claims 9, 10, and 20-22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Haseley et al and Canada et al in view of U.S. Patent No. 5,802,151 (Bevill, Jr. et al). However, claims 9 and 10 depend from claim 1, and claims 20-22 depend from claim 19. Since claims 1 and 19 are in condition for allowance for the reasons set forth above, Applicant submits that claims 9, 10, and 20-22 are also in condition for allowance, the allowance of which is hereby respectfully requested.

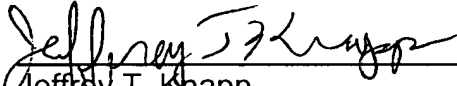
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Reply to Multiple Advisory Actions and Office Actions

Attorney Docket No.: M-181

Furthermore, Bevill, Jr. et al discloses a telephone interface protection circuit and a modem incorporating the telephone interface protection circuit. Since Haseley et al does not disclose a system which expressly has a telephone circuit, Haseley et al does not present any systematic problem to which Bevill, Jr. et al could be directed. Further, Haseley et al does not present its data in a manner conducive to display by a series of LED's, contrary to the suggestion by the Examiner. Thus, there is no motivation to combine Bevill, Jr. et al with the primary reference Haseley et al.

If the Examiner has any questions or comments that would speed prosecution of this case, the Examiner is invited to call the undersigned at 260/485-6001.

Respectfully submitted,


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JTK/mdc

Encs: Amendments to the Claims
(12 Sheets; pp. 8-19)
Explanatory Cover Sheet Page 1
Request for Continued Examination
(2 Sheets)
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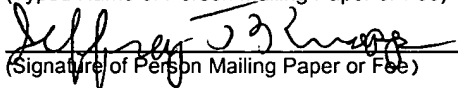
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